

CLAIMS

We claim:

1. A digital media playing system comprising:

a portable digital media container having a radio frequency identification

- 5 (RFID) tag, containing RFID tag information, coupled thereto; and

a media playing device having a radio frequency identification tag reader

operatively coupled therewith to read information from the RFID tag on the portable media container, wherein the media playing device further includes a controller operatively

responsive to the information read from the portable media container and operative to

- 10 retrieve, from a device at a remote location, additional information associated with the

portable media container and wherein the media playing device is operative to play audio

and/or video, retrieved from the remote location or contained on a medium associated with the portable media container.

2. The digital media playing system of claim 1 wherein the RFID tag information

- 15 includes at least encrypted RFID tag identification information and remote content identification information and wherein the RFID reader is operative to perform electronic authentication of the portable digital media container prior to obtaining the content identification information.

3. The digital media playing system of claim 1 wherein the additional information is

- 20 encrypted digital audio and/or video media downloaded from the device at the remote location and wherein the device at the remote location provides data representing playlist information that identifies which encrypted digital audio and/or video media is to be downloaded and corresponding decryption keys to decrypt the downloaded digital audio and/or video media.

- 25 4. The digital media playing system of claim 1 wherein the media playing device is operative to retrieve additional information that includes at least one of: digital audio and/or video content that is played by the media playing device and on-line service information such that the on-line information requires two way communication between the device at the remote location and the media playing device.

5. The digital media playing system of claim 1 wherein at least a portion of the RFID tag information is encrypted and wherein the controller obtains the additional information in a secure manner.

6. The digital media playing system of claim 1 wherein the portable media playing device is operative to commence playing of retrieved additional information associated with the read RFID tag information in response to retrieval of the additional information.

7. The digital media playing system of claim 1 wherein the media playing device is at least one of: an RFID reader enabled TV, an RFID reader enabled cable set top box, and RFID reader enabled DVD player, and an RFID reader enabled portable device.

8. The digital media playing system of claim 1 wherein the media playing device further includes an RFID writer operative to contactlessly write information to the portable digital media container and where the controller is operative to control the RFID writer to write information retrieved from the device at the remote location.

9. A digital media container for holding a digital media storage medium that contains digital content comprising:

a radio frequency identification (RFID) tag operative to contactlessly provide information to an RFID reader, coupled to a surface of the digital media container, the RFID tag containing data representing at least:

encrypted RFID tag data; and

remote content identification data that identifies downloadable content in addition to the digital content stored on the digital storage medium.

10. A digital media container of claim 9 having structure that defines a housing that holds at least one of: at least an optical storage device, magnetic storage device and integrated circuit memory device.

11. A digital media storage medium comprising:

a radio frequency identification (RFID) tag operatively coupled thereto and operative to contactlessly provide information to an RFID reader, the RFID tag containing data representing at least:

encrypted RFID tag data; and

remote content identification data that identifies downloadable content in addition to the digital content stored on the digital storage medium.

12. A digital media playing device comprising:
a digital audio and/or video playing subsystem;
a radio frequency identification tag reader operatively coupled to the digital
audio and/or video playing system and operative to read information from at least one of: an
5 RFID tag on a portable media container and an RFID tag on an object; and
a controller operatively responsive to the information read from the portable
media container and operative to securely retrieve, from a device at a remote location,
additional information associated with the portable media container; and
wherein the media playing subsystem is operative to play audio and/or video,
10 retrieved from the remote location or contained on a medium associated with the portable
media container.

13. The digital media playing device of claim 12 including memory, operatively coupled
to the controller, containing at least player ID data, playlist data and received decryption keys
associated with the playlist data and wherein the controller includes a media cryptography
15 engine operative to authenticate at least one of the portable digital media container and the
RFID enabled article.

14. The digital media playing device of claim 12 including a display and wherein the
controller is operative to produce a media player user interface that presents at least data
representing:

20 online service content downloaded from an online server based on
content identification information obtained from the RFID tag on the portable media
container or an RFID tag on the article;

media content securely downloaded from a remote media source based
on the content identification information obtained from the RFID tag on the portable media
25 container or an RFID tag on the article; and

media player control graphics for providing media player control to
control play of the media content downloaded from the remote media source.

15. The digital media playing device of claim 14 wherein the media player user interface
also includes data representing visual indicia located on the RFID tag on a portable media
30 container or the RFID tag on an article.

16. A method for securely obtaining content from a content source comprising:

reading an RFID enabled article that contains at least an encrypted RFID tag ID and remote content ID data;

securely sending at least the read content ID from the RFID enabled article to a digital rights management service provider (DRM) and data identifying a media playing
5 device;

obtaining, by the DRM, content ID data based on the sent content ID;

obtaining, by the DRM, data representing at least one cryptographic decryption key for decrypting encrypted content indexed by the content ID data; and

securely sending, by the DRM, at least the content ID data and the data
10 representing the at least one cryptographic decryption key for a media player.

17. The method of claim 16 including:

checking a cache of previously obtained encrypted content based on content ID data to determine if the content was already retrieved;

if the content ID data is not present in the cache then retrieving encrypted
15 content from the content source based on the content ID data;

storing the retrieved encrypted content in cache;

decrypting the encrypted content using the data representing the at least one cryptographic decryption key;

securely accessing an online service; and

20 playing the decrypted content that was obtained based on the read RFID tag id from the RFID enabled article.

18. A digital rights management service provider comprising:

a media encryptor operative to encrypt at least one of audio and video data;

a key database containing decryption keys indexed to corresponding encrypted
25 media;

a trusted RFID enabled media player database containing a plurality of trusted media player identifiers;

a content registry containing linked encrypted media identification information with corresponding content identification information; and

30 an RFID writer operatively coupled to the content registry and operative to write at least content identification information to an RFID enabled article.

19. A method for securely obtaining content from a content source comprising:

receiving, from an RFID tag, RFID tag identification information and content identification information relating to downloadable content associated with the RFID tag; securely sending the RFID tag identification information and content identification information to a digital rights management service; and

5 receiving in a secure manner the content from the content source, and if desired data to allow access to an online service, in response to sending the RFID tag data and content identification information.

20. The method of claim 19 including:

securely sending media player authentication information to the digital rights management service; and

10 wherein receiving in a secure manner the content from the content source, and if desired data to allow access to an online service, is based on authentication of the media player in response to the sent media player authentication information.

21. A method for securely obtaining content from a content source comprising:

15 receiving, from an RFID enabled object having content description thereon, secure RFID tag identification information and content identification information relating to downloadable content associated with the RFID enabled object;

sending, if authentication was successful, the content identification information and RFID enabled media playing device identification information to a digital rights management service provider;

20 receiving, in response to sending the content identification information and the RFID enabled media playing device identification information, downloadable content identification information and at least one cryptographic key necessary to securely decrypt the content;

25 securely obtaining the content from the content source; and
decrypting the received content based on the cryptographic key.

22. A digital video and/or audio media object comprising:

a handheld article having digital video and/or audio content identification indicia thereon that visually identifies remotely stored digital video and/or
30 audio content and an RFID tag containing at least contactlessly transmittable RFID tag identification data and remote digital content identification data.

23. The digital video and/or audio media object of claim 22 wherein subscription information is associated therewith to effect a subscription based RFID object.
24. The digital video and/or audio media object of claim 22 wherein the content identification indicia thereon represents at least one movie that is remotely stored.
- 5 25. The digital video and/or audio media object of claim 22 wherein the content identification indicia thereon represents at least one song that is remotely stored.
26. The digital video and/or audio media object of claim 22 wherein the handheld article is at least one of: a card, a ticket, apparel, and a three-dimensional article.
27. The digital video and/or audio media object of claim 22 wherein the remotely stored
10 digital video and/or audio content includes content from at least one of: a radio broadcast, A television broadcast and a web server.